U.S. Department of Health and Human Services

NATIONAL HEALTH SERVICE CORPS REPORT TO CONGRESS FOR THE YEAR 2016

Submitted to

The Committee on Health, Education, Labor and Pensions
U.S. Senate

and

The Committee on Energy and Commerce
U.S. House of Representatives

Executive Summary

The report to Congress for 2016 details the program accomplishments of the National Health Service Corps (NHSC), which is charged with helping communities in the Health Professional Shortage Areas (HPSAs) of greatest need provide primary health care services through the recruitment and retention of primary care health professionals. The report:

- Provides updates on HPSA information,
- Defines the need for primary care services through requests for recruitment and retention assistance from underserved communities,
- Shows the current NHSC Field Strength[1] and the projection for next year,
- Explains recruitment efforts for the NHSC Scholarship and Loan Repayment Programs,
- Provides estimates on the number of patients seen by NHSC clinicians,
- Details the most recent short-term and long-term retention rates of NHSC clinicians who have fulfilled the service obligation and continue to serve the underserved, and
- Describes the evaluation process to determine compliance with section 333(a)(1)(D) of the Public Health Service Act for inclusion on the Health Workforce Connector (formerly NHSC Jobs Center).

Significant findings in the report include the following:

- NHSC and many federal and state workforce programs use HPSA designations for resource allocation. As of September 30, 2016, the following types and number of HPSAs were identified:

HPSA Type	Number of HPSAs
Primary Care	6,463
Dental Health	5,390
Mental Health	4,472

- The NHSC Field Strength in fiscal year (FY) 2016 was 10,493. NHSC clinicians served in urban, rural, and frontier communities in all 50 states, the District of Columbia, the Commonwealth of Puerto Rico, the United States Virgin Islands, and the Pacific Basin.[2]

- In FY 2016, NHSC clinicians provided care to more than 11 million people. Over 50 percent of NHSC clinicians serve in Health Centers supported by Health Resources and Services Administration (HRSA) grants; the remaining offer patient care services in Rural Health Clinics, group or private practices, hospital-based outpatient clinics, and similar sites located in HPSAs that are not supported by HRSA grants.

[1] "NHSC Field Strength," as this term is used in this report, includes clinicians recruited through the NHSC Loan Repayment Program, NHSC Scholarship Program, NHSC Students-to-Service Loan Repayment Program, and the State Loan Repayment Program.

[2] Pacific Basin includes American Samoa, the Federated States of Micronesia, Guam, the Republic of the Marshall Islands, the Commonwealth of the Northern Mariana Islands, and the Republic of Palau.

- Approximately 23 percent of NHSC placements in FY 2016 were in facilities that served rural areas.[3]

- NHSC remains committed to an interdisciplinary approach to patient care. The discipline mix of the NHSC Field Strength reflects this commitment and the program's efforts to respond to underserved communities' demand for services.

- The NHSC Scholarship and Loan Repayment Programs continue to serve as vital recruitment tools for underserved communities in need of primary care, oral health, and behavioral health services. In FY 2016, NHSC made the following new and continuation awards:

NHSC Program	Number of Awards
Scholarship	213
Loan Repayment	5,190
Students-to-Service Loan Repayment	92

- In FY 2016, NHSC received $310 million through the Medicare Access and CHIP Reauthorization Act of 2015 (MACRA). In FY 2016, MACRA funded all the individual awards listed above. NHSC also awarded 37 continuation grants to states through the State Loan Repayment Program with MACRA funds.

[3] NHSC uses the Federal Office of Rural Health Policy definition for identifying when an NHSC approved site is rural. See http://www.hrsa.gov/ruralhealth/policy/definition_of_rural.html.

HRSA
Health Resources & Services Administration

National Health Service Corps
Report to Congress for the Year 2016

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Acronym List

ACSI	American Customer Satisfaction Index
BCRS	Bureau of Clinician Recruitment and Service
BHW	Bureau of Health Workforce
BMISS	Bureau of Health Workforce Management Information System Solution
CAH	Critical Access Hospital
CHIP	Children's Health Insurance Program
CSI	Customer Satisfaction Index
FQHC	Federally Qualified Health Center
FY	Fiscal Year
HPSA	Health Professional Shortage Area
HRSA	Health Resources and Services Administration
IHS	Indian Health Service
LRP	Loan Repayment Program
MACRA	Medicare Access and CHIP Reauthorization Act of 2015
NHSC	National Health Service Corps
PHS	Public Health Service
PPO	Private Practice Option
S2S LRP	Students-to-Service Loan Repayment Program
SLRP	State Loan Repayment Program
SP	Scholarship Program

I. Legislative Language

The current report requirements are found at section 336A of the Public Health Service (PHS) Act [42 USC § 254i]:

"*The Secretary shall submit an annual report to Congress, and shall include in such report with respect to the previous calendar year:*[4]

(1) the number, identity, and priority of all health professional shortage areas designated in such year and the number of health professional shortage areas which the Secretary estimates will be designated in the subsequent year;
(2) the number of site applications filed under section 333 of this title in such year for assignment of Corps members and the action taken on each such application;
(3) the number and types of Corps members assigned in such year to health professional shortage areas, the number and types of additional Corps members which the Secretary estimates will be assigned to such areas in the subsequent year, and the need for additional members for the Corps;
(4) the recruitment efforts engaged in for the Corps in such year and the number of qualified individuals who applied for service in the Corps in such year;
(5) the number of patients seen and the number of patient visits recorded during such year with respect to each health professional shortage area to which a Corps member was assigned during such year;
(6) the number of Corps members who elected, and the number of Corps members who did not elect, to continue to provide health services in health professional shortage areas after termination of their service in the Corps and the reasons (as reported to the Secretary) of members who did not elect for not making such election;
(7) the results of evaluations and determinations made under section 333(a)(1)(D) of this title during such year; and
(8) the amount charged during such year for health services provided by Corps members, the amount which was collected in such year by entities in accordance with section 334 of this title, and the amount which was paid to the Secretary in such year under such agreements."[5]

[4] Data provided in this report are FY data, reported in accordance with how funds are appropriated to NHSC.
[5] The Health Care Safety Net Amendments of 2002 amended Section 334 [42 USC § 254g] to eliminate the requirement that entities receiving NHSC assignees reimburse the agency for health services provided by those Corps members. Therefore, reporting element #8 is no longer relevant.

The report provides information on each of these requirements as well as related program information and activities. This report includes fiscal year (FY) data, reported in accordance with funds appropriated to the National Health Service Corps (NHSC) Program.[6] This report enables NHSC to discuss activities and initiatives that align with the mission of the program.

II. Introduction

This report to Congress describes NHSC program activities for 2016. The Bureau of Health Workforce (BHW), Health Resources and Services Administration (HRSA), Department of Health and Human Services manages this program. NHSC was established December 31, 1970, by the Emergency Health Personnel Act of 1970 (Public Law 91-623), and the Act has been amended and reauthorized several times in the ensuing 45 years. Beginning in FY 2011, BHW made changes to the program, including authorizing a maximum annual loan repayment award of $50,000 per year for the NHSC Loan Repayment Program (LRP), offering the option of half-time service for both scholars and loan repayors, and allowing service credit for teaching.

NHSC posted a slight increase in Field Strength from 9,683 clinicians in FY 2015 to 10,493 in FY 2016, nearly tripling the 3,601 NHSC clinicians who served in 2008. Field Strength includes clinicians recruited through the NHSC LRP, the NHSC Students-to-Service Loan Repayment Program (S2S LRP), the NHSC Scholarship Program (SP), and the State Loan Repayment Program (SLRP).

There continues to be tremendous interest in these programs, and in 2016, BHW maintained its robust online and in-person recruitment activities. In FY 2016, NHSC SP and LRP received 9,478 applications, a 6.5 percent increase from FY 2015. BHW used social networking, increased collaboration, and online visibility to recruit eligible NHSC applicants. BHW also collaborated with 16 national health professional organizations with missions similar to NHSC to expand the visibility of NHSC. These groups represent clinicians, students, residents, school administrators, and sites serving underrepresented racial and ethnic minorities, Rural Health Clinics, and communities. BHW exhibited at 15 national partner conferences, developed and launched a new NHSC Partnership webpage (http://www.nhsc.hrsa.gov/partners/index.html) to provide individuals and organizations with resources about NHSC's scholarship and loan repayment opportunities, and hosted five Virtual Job Fairs in which 200 representatives of more than 1,200 facilities from 38 states and Washington, DC, participated.

In addition, BHW worked with NHSC Ambassadors (past program participants who educate and inform prospective Corps members and support new and existing members) to expand the reach of recruitment activities. BHW provided NHSC Ambassadors with several new tools, including a tool kit, tutorial, and communications templates for use in recruiting eligible NHSC applicants. Many of these tools are available online. Building on this effort, in FY 2016, BHW held

[6] The Bureau of Health Workforce (BHW) Management Information System Solution (BMISS) collects NHSC Program data. The BMISS is an IT system modernization program that replaces and/or retires a multitude of legacy systems that contain information collected from individual scholarship and loan repayment applications, recruitment and retention assistance applications, and monitoring data from individual sites. SLRP data is collected at the grantee level and reported to BHW Program Officers.

webinars and quarterly Ambassador conference calls to share best practices and information on how to use these newly created tools.

An important measure of the success of NHSC is the retention of NHSC clinicians in service to the underserved after the fulfillment of their NHSC commitment. A study completed in FY 2016 showed approximately 88 percent of those who had fulfilled their NHSC commitment remained in service to the underserved in the short term, defined as up to 2 years after their NHSC commitment ended.[7] The Lewin Group found in a September 2016 study that "79 percent of NHSC participants serve in primary care HPSAs [Health Professional Shortage Areas] one year after completion of their NHSC service," though "less than half of participants who are still in primary care HPSAs one year after separation are actually in the same county as the one in which they served while in service (i.e., 43 percent of participants)."[8] An evaluation conducted in FY 2012 showed that 55 percent of NHSC clinicians continue to practice in underserved areas 10 years after completing their NHSC service commitment[9] reaffirming findings from an earlier study in FY 2000, which showed the majority of NHSC clinicians remained committed to service to the underserved in the short and long term.[10]

III. Overview

In FY 2016, NHSC awarded 205 new scholarships, 8 scholarship continuations, 3,079 new loan repayments, and 2,111 loan repayment continuations. In FY 2016, NHSC continued implementation of the S2S LRP, offering loan repayments to medical students in their last year of school. The program encourages medical students to select a primary care specialty and requires a 3-year service commitment in a high priority Health Professional Shortage Area (HPSA).[11] The commitment begins once the primary care residency is complete. In FY 2016, NHSC made 92 S2S LRP awards.

In FY 2016, NHSC also continued implementation of the enhanced award structure in the NHSC LRP to incentivize clinicians to work in the most underserved areas of the country, offering up to $50,000 for an initial 2-year contract for those clinicians serving full-time in HPSAs with a score of 14 or higher. For those serving full-time in HPSAs below that score, the maximum award for an initial 2-year contract is $30,000. BHW introduced these tiers in FY 2012. All loan repayors were eligible for the same amount of funding regardless of HPSA score prior to FY 2012.

In FY 2016, to extend the reach of NHSC in rural areas, NHSC continued placing clinicians in Critical Access Hospitals (CAH). Prior to the FY 2012 CAH pilot program, only the outpatient

[7] 2016 National Health Service Corps Participant Satisfaction Survey.
[8] Negrusa, S, Hogan, P, Ghosh, P, Watkins, L. "National Health Service Corps – An Extended Analysis". September 2016. https://aspe.hhs.gov/pdf-report/national-health-service-corps-extended-analysis
[9] "Evaluating Retention in BCRS Programs" Final Report. March 30, 2012. Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill.
[10] "Evaluation of the Effectiveness of the National Health Service Corps" Final Report. May 31, 2000. Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill and Mathematica Policy Research, Inc.
[11] Currently defined as having a HPSA score of 14 or above. HPSA scoring methodology is described in more detail later in the report.

clinic of a CAH was an eligible site, and NHSC clinicians were generally limited to no more than 8 hours per week in the inpatient setting. With the pilot program, clinicians may now spend up to 24 hours per week in the CAH inpatient setting and spend no fewer than 16 hours per week in an affiliated outpatient clinic.[12] The pilot program ended in FY 2015, and CAHs are now permanent NHSC-eligible sites. HRSA approved 230 active CAHs as NHSC sites and 60 NHSC clinicians were practicing in a CAH as of September 30, 2016.

IV. Report Requirements

Requirement #1: The number, identity, and priority of all HPSAs designated in such year and the number of HPSAs which the Secretary estimates will be designated in the subsequent year.

The designation of an HPSA is an applicant-driven process. Any individual or agency may apply to have a geographic area, population group, or facility designated as a HPSA. The designation process involves two types of actions: (1) the analysis of the data submitted with each new request, and (2) the review of previously designated HPSAs. HRSA determines the priority of a HPSA by assigning a numerical score based on a calculation weighing a number of factors of need, including physician-to-population ratio, infant mortality, access to health services, health status, and the ability to pay for health services. Although HRSA reviews and updates HPSAs on a 3-year cycle, an exception to this process is a permanent automatic designation of certain facility HPSAs (e.g., Federally Qualified Health Centers [FQHCs], FQHC Look-Alikes, and those Rural Health Clinics that provide services regardless of ability to pay).[13] Originally, the HPSA designation provided for the placement of NHSC clinicians, and currently more than 30 federal and state programs and agencies use the HPSA designation for resource allocation. HRSA publishes a list of designated HPSAs annually in the *Federal Register.* Additionally, HRSA maintains an online database (updated daily) of designated HPSAs and their HPSA scores (http://hpsafind.hrsa.gov).

As of September 30, 2016, there were 6,463 primary care HPSAs, 5,390 dental health HPSAs, and 4,472 mental health HPSAs (more information at http://www.hrsa.gov/shortage/). Overall, the number of HPSAs has increased more than 3 percent from FY 2015. HRSA anticipates that the number of HPSAs in FY 2017 will increase by the same or a slightly higher percentage.

[12] Placement at CAHs is limited to physicians, physician assistants, nurse practitioners, and certified nurse midwives.

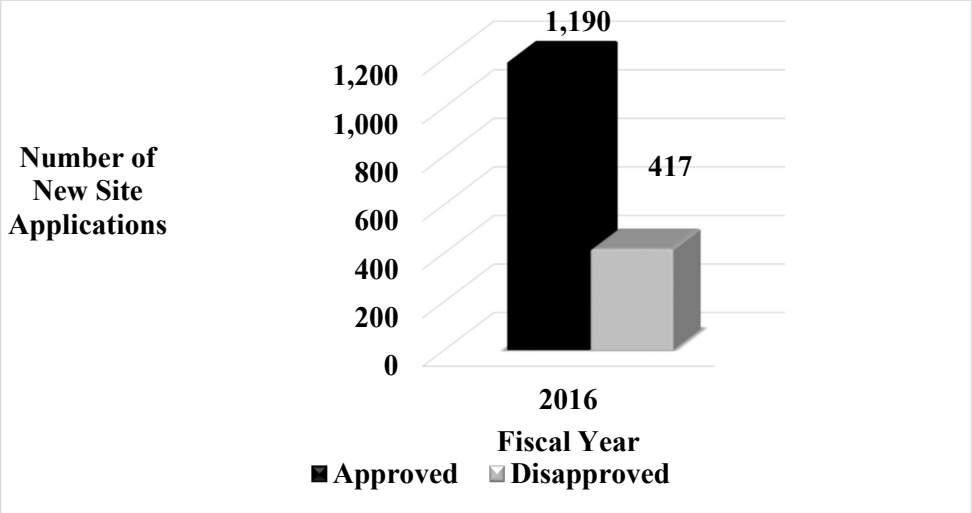
[13] The Health Care Safety Net Amendments of 2002 established the automatic facility HPSA designation for these facilities for a period of 6 years; subsequent amendments to the Act were made through the Health Care Safety Net Act of 2008, which made the automatic facility designation permanent.

Requirement #2: The number of site applications filed under section 333 of this title in such year for assignment of Corps members and the action taken on each such application.

Section 333 of the PHS Act establishes the framework by which NHSC evaluates formal requests from facilities seeking eligibility for NHSC recruitment and retention assistance (see **Requirement #7** for a description of the evaluation process). Eligibility is based on the continued need for health professionals in the area; the appropriate and efficient use of NHSC members previously assigned to the entity; community support for the assignment of an NHSC member to that entity; the facility's unsuccessful efforts to recruit health professionals from other sources; the reasonable prospect of sound financial management by the entity; and the entity's willingness to support or facilitate mentorship, professional development, and training opportunities for Corps members. Specific requirements for participation as an NHSC-approved site include, providing health services in or to a designated HPSA; providing comprehensive primary care services; providing services on a free or reduced fee schedule basis to individuals at or below 200 percent of the federal poverty level; and accepting patients covered by Medicare, Medicaid, and the Children's Health Insurance Program (CHIP). More information on site eligibility is available on NHSC website (http://www.nhsc.hrsa.gov/sites/index.html).

HRSA lists facility vacancies for primary care, dental, and mental health providers in high-need areas in the NHSC Health Workforce Connector (formerly Jobs Center), which are used to process applications for assignment of Corps members. In FY 2013, NHSC instituted an application cycle that limited the period of time in which new site applications could be submitted. The FY 2016 new site application cycle opened April 12, 2016, and closed June 7, 2016. NHSC also accepted applications from sites classified as having automatic HPSA designation as defined by Section 332(a)(1) of the PHS Act (42 U.S.C. 254e(a)(1)) throughout the year, from October 1, 2016, through September 30, 2016. The number of new site applications approved in the FY 2016 application cycle was 563, with 407 disapproved. The cumulative number of new site applications including auto-designated sites submitted for FY 2016 was 1,607 with 1,190 approved and 417 disapproved. There are currently more than 16,000 NHSC-approved sites. Figure 1 shows the disposition of new site applications received in FY 2016.

Figure 1: Disposition of New Site Applications, FY 2016

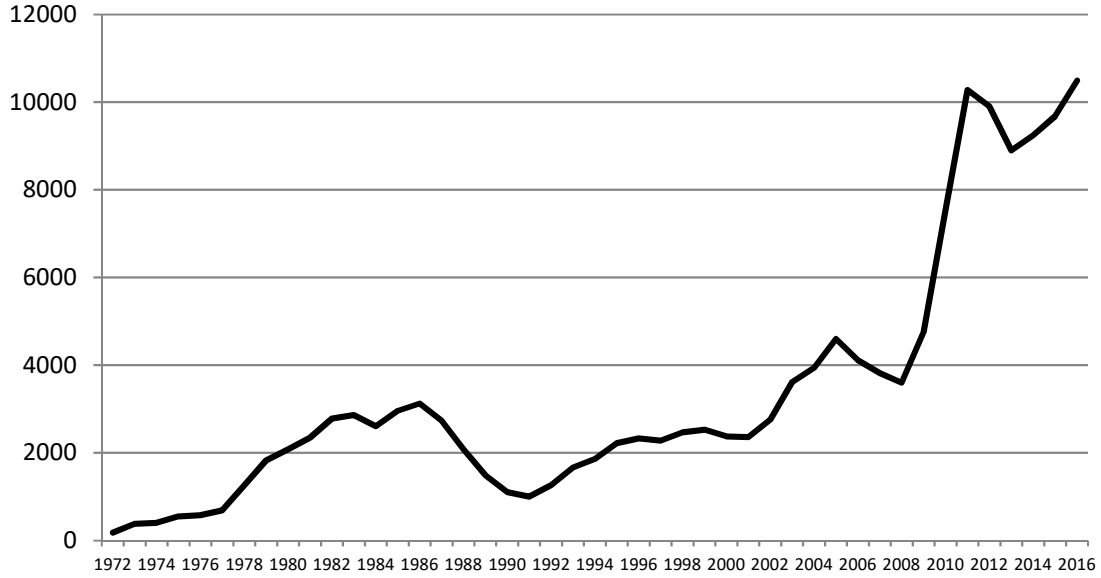


Requirement #3: The number and types of Corps members assigned in such year to HPSAs, the number and types of additional Corps members which the Secretary estimates will be assigned to such areas in the subsequent year, and the need for additional members for the Corps.

The 10,493 clinicians enumerated in the FY 2016 NHSC Field Strength make this the largest cohort since the first placements were made in 1972 (see **Appendix A** for distribution of NHSC clinicians by discipline and program for FY 2016). NHSC recruits clinicians by several mechanisms: the NHSC SP and LRP, the S2S LRP, and the SLRP.[14] Though NHSC clinicians who have chosen the Private Practice Option (PPO) provided under section 338D of the PHS Act [42 USC § 254n] and the participants in SLRP are not considered to be "members of the Corps," the yearly NHSC Field Strength calculation accounts for them, as PPO clinicians and SLRP participants are supported by NHSC funds. The Field Strength in FY 2016 includes those who began service in that year, as well as those whose service began in previous years and who are still fulfilling a service commitment to NHSC. NHSC clinicians who have fulfilled their service commitment and retained in service to the underserved (see **Requirement 6**) are not included. Figure 2 shows the history of the NHSC Field Strength from FY 1972 through FY 2016.

[14] SLRP is a grant program to states for offering loan repayment awards to clinicians in return for a minimum 2-year commitment to provide primary care services in a HPSA in the state. The state must match the federal grant funds dollar-for-dollar and must provide funding for the administration of the program; no federal funds may be used for this purpose. In FY 2014, SLRP awarded 38 new grants to the states. Note: in Appendix A, SLRP clinicians are not included in the Urban/Rural and Grant/Non-Grant columns.

Figure 2: NHSC Field Strength, FYs 1972 – 2016



Ensuring greater racial and ethnic diversity of the health care workforce is essential for increasing access to culturally competent care for all members of our nation's communities, improving opportunities and representation of all groups within the health professions, and for better meeting the overall needs of our nation's diverse population, particularly in the most underserved areas.[15] Historically and currently, many racial and ethnic and minority groups are underrepresented nationally within the major health professions.[16] As a result, NHSC is working to increase the number of minority clinicians.[17] In FY 2016, Black or African American physicians represented 17.2 percent of the Corps physicians, exceeding their 4.1 percent share in the national physician workforce.[18] Hispanic or Latino physicians represented 18.2 percent of the Corps physicians, exceeding their 4.4 percent share in the national physician workforce.[19] Hispanic or Latino, Black or African American, and Asian NHSC LRP and SP participants surpassed national health care workforce averages of dentists, and Black or African American NHSC LRP and SP participants surpassed national health care workforce averages of nurse

[15] Cohen JJ, Gabriel BA, Terrell C. The case for diversity in the health care workforce. Health Aff (Millwood). 2002 Sep-Oct; 21(5): 90-102 (http://content.healthaffairs.org/content/21/5/90.full).
[16] U.S. Department of Health and Human Services, Health Resources and Services Administration, National Center for Health Workforce Analysis. Sex, Race, and Ethnic Diversity of U.S. Health Occupations (2010-2012), Rockville, Maryland; 2014 (https://bhw.hrsa.gov/sites/default/files/bhw/nchwa/diversityushealthoccupations.pdf).
[17] With regard to race and ethnicity data discussed in this report to Congress, participant data are self-reported and individuals may select multiple racial categories. These responses are collected internally and compiled based on the total responses, including the non-responses received. Hispanic or Latino/Non-Hispanic or Latino self-reported ethnicity data in the BMISS is separate from the race category. Therefore, the total percent of Hispanics or Latinos is based on total ethnicity. As a result, Hispanic or Latino data may be over reported as this information is the only metric for capturing ethnicity. This data, with respect to the NHSC Field Strength and pipeline, is then compared to national workforce and student enrollment data/percentages respectively.
[18] Association of American Medical Colleges Data Warehouse: Minority Physician Database, 2014.
[19] *Ibid.*

practitioners.[20] Among NHSC participants, the proportion of Hispanic or Latino psychologists is above the national health workforce average.[21]

Based on self-reports of the 1,346 NHSC scholars (i.e., those in school, pursuing post-graduate training, or awaiting placement in an NHSC-approved service site), 17.8 percent are Black or African American, 15.2 percent are Asian or Pacific Islander, and 2.3 percent are American Indian or Alaska Native. Moreover, 14.5 percent of NHSC scholars self-identified as Hispanic or Latino. Blacks or African Americans exceed national student enrollment averages for students participating in NHSC across all eligible disciplines/specialty categories except nurse practitioners and nurse midwives.[22] Hispanic or Latino NHSC scholars exceeded student enrollment averages in dentistry as they represent 11.9 percent of the Corps dental participants compared to their 7.8 percent share of the national student enrollment.[23] American Indian and Alaska Natives exceed national student enrollment averages in dentistry, medicine, physician assistants, and nursing disciplines in NHSC.[24]

NHSC estimates the FY 2017 Field Strength to be over 9,300 clinicians. This represents a reduction from the FY 2016 level due in part to a projected decrease in the number of NHSC LRP and SLRP participants in service because they have fulfilled their service obligation and are no longer counted in the Field Strength.

Requirement #4: The recruitment efforts engaged in for the Corps in such year and the number of qualified individuals who applied for service in the Corps in such year.

Since FY 2010, NHSC has used data collected from the annual NHSC Satisfaction Surveys as a baseline to measure site and participant satisfaction and to identify areas where NHSC may improve recruitment and retention of Corps members in HPSAs. NHSC also uses results from the voluntary and anonymous survey to improve program delivery and prioritize future projects and initiatives. In FY 2016, a survey of NHSC participants resulted in an overall Customer Satisfaction Index (CSI)[25] score of 80 (a one-point increase since FY 2015), as NHSC participants continue to report a consistently higher level of satisfaction with their experience in NHSC compared to the public's satisfaction with government programs overall (CSI score of 64).

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[20]U.S. Department of Labor, Bureau of Labor Statistics, Labor Force Characteristics by Race and Ethnicity (2015) used for comparison.
[21]*Ibid*.
[22]American Dental Association, 2014-2015 Survey on Dental Education: Academic Programs, Enrollments, and Graduates. Association of American Medical Colleges, 2015-2016. American Association of Nursing, 2016. 29th Physician Assistant Education Association Annual Report, 2012-2013.
[23] *Ibid.*
[24] *Ibid.*
[25] The American Customer Satisfaction Index (ACSI) methodology is used to identify the drivers of customer satisfaction and their impact on performance. The ACSI is the only uniform, cross-industry/government measure of customer satisfaction in the United States, and it includes more than 300 private-sector company scores and over 100 federal or local government program scores. Performance scores (survey scores on rated items) are on a 0-100 scale.

NHSC Recruitment Materials

There are a few ways that NHSC LRP applicants become aware of the Corps. Feedback from NHSC LRP applicants indicate that many became aware of the Corps through their work site, school, NHSC web searches and social media, and friend or family word of mouth. In FY 2015, NHSC developed communication materials that are used for a variety of distribution channels to recruit eligible applicants and raise awareness of NHSC.

NHSC also continued to use member stories and member videos to highlight the impact of NHSC on communities with limited access to care often releasing these materials to coincide with national health observances like National Health Center Week. There were more than 169,000 views of NHSC videos in FY 2016 compared to 156,600 views for FY 2015. The popularity of the member videos relates directly to active promotional efforts and the campaigns implemented for them. NHSC selected the videos for these campaigns because they represent gender, discipline, and racial diversity both in the providers and in the population served. They provide a compelling glimpse into the life of an NHSC provider, featuring those who are implementing best practices for care in their communities.

In addition, NHSC conducted direct outreach to potential program participants to announce the opening of the FY 2016 NHSC application cycles. E-Blasts (mass emails) were sent to a large mailing list of more than 221,000 prospective NHSC LRP and SP applicants, school administrators, and NHSC partners including Ambassadors, NHSC alumni, the National Advisory Council, professional associations, NHSC sites, program participants, and State Primary Care Offices.

As summarized in the Tables below, in FY 2016, these efforts resulted in more than 2,200 applications submitted to the NHSC SP and more than 7,200 applications submitted to the NHSC LRP.

Table 1: NHSC SP Applications, FY 2016

	FY 2016
Applications Received	2,275
New Awards	205

Table 2: NHSC LRP Applications, FY 2016

	FY 2016
Applications Received	7,203
New Awards	3,079

Table 3: S2S LRP Applications, FY 2016

	FY 2016
Applications Received	174
New Awards	92

NHSC Communications Strategy

In FY 2016, NHSC used multiple channels, including earned, paid, and social media, to increase program awareness among prospective program participants. These efforts enable NHSC to reach a broader pool of applicants and enhance recruitment and retention of qualified participants:

- Between October 1, 2015 and September 30, 2016, the number of NHSC Facebook page "likes" increased from more than 34,000 to almost 36,000, a 6 percent increase. The number of NHSC Twitter followers increased from more than 8,600 to more than 9,000, an increase of nearly 5 percent.
- NHSC hosted several Facebook chats in 2016, focusing on finding primary care jobs in high-need locations and integrating behavioral health into primary care. More than 500 applicants, members, and interested parties attended the chats, which garnered more than 450 page likes.
- An earned media campaign to encourage applications to the S2S LRP garnered 12 print, online, and broadcast pieces, reaching over 1 million individuals.
- Online paid media campaigns ran from January through September 2016 to promote the Health Workforce Connector and increase Virtual Job Fair registrations, application cycles, and general program awareness. The campaigns yielded more than 36.5 million impressions and 924,700 clicks.

NHSC Stakeholder Engagement and Conferences/Exhibits

In FY 2016, NHSC stakeholder outreach promoted NHSC programs. By fostering relationships with 19 national health organizations, NHSC expanded its reach to larger and more diverse audiences including students, clinicians, faculty, school administrators, sites serving underrepresented racial and ethnic minorities, and rural communities. These groups included the Association of American Medical Colleges, American Association of Colleges of Osteopathic Medicine, National Medical Association, Hispanic Medical Association, Association of Clinicians for the Underserved, American Dental Association, Black Nurses Association and student groups such as the American Medical Student Association, Student National Medical Association, and Latino Medical Student Association.

HRSA and the Indian Health Service (IHS) work together to use NHSC programs as recruitment tools to fill health professional vacancies at Tribal sites. Tribal, IHS, and Urban Indian facilities (Tribal sites) that exclusively serve Tribal members can qualify as NHSC sites, extending their ability to recruit and retain primary care providers by utilizing NHSC scholarship and loan repayment incentives. Since FY 2011, the Division of Regional Operations in BHW worked with Tribal sites, offering hands-on assistance for completing site profiles and posting vacancies on the NHSC Jobs Center (now the Health Workforce Connector). BHW's Shortage Designation Branch works with Tribal sites to verify that their HPSA scores are current, enabling the sites to be competitive in recruiting NHSC scholars and loan repayors. Eligible clinicians at 701 Tribal sites qualified for NHSC loan repayment, and 492 NHSC clinicians served at Tribal sites across the country as of September 30, 2016.

Virtual Job Fairs

BHW hosted five NHSC Virtual Job Fairs, which included presentations from over 200 representatives of over 1,200 facilities from 38 states, including the District of Columbia and the Northern Mariana Islands. These representatives were recruiting for approximately 3,714 job vacancies. Over 3,878 job-seeking providers participated. Additionally, BHW hosted a special Virtual Job Fair in February of 2016 to support the recruitment efforts for the Tribal sites. During this event, 50 sites presented more than 500 vacancies to more than 430 job seekers.

Ambassador Program

NHSC revamped its Ambassador Program of dedicated participants who educate, train, serve, and lead in communities across the United States. Nearly 800 participants nationwide helped to spread the word about NHSC opportunities through health fairs, exhibits, presentations, and financial aid sessions, and by serving as local resources for current NHSC members working in underserved communities. NHSC fostered this relationship through Ambassador informational and training sessions, including webinars, conference calls, and updates to the Ambassador Directory as a public resource.

Involvement from Ambassadors at minority serving academic medical institutions representing Historically Black Colleges and Universities, Hispanic Serving Institutions, Asian Americans and Pacific Islanders and Tribal Colleges and Universities, Indian/Tribal Academic Institutions, and schools with strong rural health tracks remains a focus for the program and overall NHSC outreach.

Requirement #5: The number of patients seen and the number of patient visits recorded during such year with respect to each HPSA to which a Corps member was assigned during such year.

In aggregate, NHSC clinicians serving in FY 2016 saw more than 11 million patients and generated 44.08 million patient visits. NHSC estimates that primary care NHSC clinicians saw 6.09 million patients and generated 24.36 million patient visits, dental health NHSC clinicians saw 1.6 million patients and generated 6.4 million patient visits, and behavioral health NHSC clinicians saw 3.33 million patients and generated 13.32 million patient visits.

Requirement #6: The number of Corps members who elected, and the number of Corps members who did not elect, to continue to provide health services in HPSAs after termination of their service in the Corps and the reasons (as reported to the Secretary) of members who did not elect for not making such election.

NHSC continues to monitor the retention rates of NHSC scholars and loan repayors in service to the underserved beyond the fulfillment of their service commitment. Retained clinicians are those who provide care in a designated HPSA after their service obligation ends.

Short-Term Retention

NHSC is committed to continuous performance improvement. Based on the most recent Participant Satisfaction Survey results,[26] the short-term retention rate among respondents who completed their NHSC service commitment in the past 2 years is 88 percent. Applying the NHSC alumni retention rate among survey respondents to the 5,024 clinicians who successfully completed service in that period, NHSC estimates that more than 4,400 retained clinicians continue to provide primary care services to underserved communities and vulnerable populations within 2 years after completing their service commitment.

The experiences that NHSC providers have at their sites while completing their service obligations significantly influences retention among NHSC providers. The most common reasons given by participants for not remaining at their NHSC-approved site following their service commitment were financial considerations and site operations.

Long-Term Retention

On March 30, 2012, the Cecil G. Sheps Center for Health Services Research at the University of North Carolina at Chapel Hill completed a Final Report entitled "Evaluating Retention in Bureau of Clinician Recruitment and Service (BCRS) Programs," which examined long-term retention of NHSC clinicians in service to the underserved. This report estimated that 55 percent of NHSC scholars and loan repayors remained in service to the underserved as long as 10 years after fulfilling their NHSC service commitment.[27] This compares favorably with the findings from the 2000 Report entitled "Evaluation of the Effectiveness of the NHSC," which found that

[26] The 2016 National Health Service Corps Participant Satisfaction Survey (see **Requirement 4** above) found that 88 percent of those NHSC clinicians who had fulfilled their obligation within the past 2 years (957 of 1,089 survey respondents) and responded to this voluntary survey, met the program's definition of being retained; i.e., they were continuing to practice at their assigned site, were practicing at another NHSC site, or were practicing in a designated shortage area. HRSA uses survey information for **Requirement 6** due to the efficiency of this method as well as a lack of authority to require individuals out of service to provide their current place of employment.

[27] "Evaluating Retention in BCRS Programs" Final Report. March 30, 2012. Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill. The estimated retention figure of 55 percent is based on the finding that 1,745 of the 3,174 respondents to the study met the retention criteria and the sample size was sufficient to generalize to the entire population.

52 percent of those who completed their service commitment were considered retained.[28] An NHSC retention brief released in December 2012 is available on the NHSC website: (http://nhsc.hrsa.gov/currentmembers/membersites/retainproviders/retentionbrief.pdf).

Based on a more recent study commissioned by the U.S. Department of Health and Human Services' Assistant Secretary for Planning and Evaluation – and following up on a previous version released in 2014[29] – the Lewin Group examined retention rates of NHSC participants over the period between 2000 and 2014. Among key findings from this report were that about 43 percent of NHSC primary care participants were located in the same HPSA where they met their service obligation 1 year after that obligation was completed, and 79 percent were located in a HPSA location. By the sixth year after obligation completion, 26 percent of the participants were located in the same HPSA where they served during their NHSC service and 69 percent were in a HPSA location.[30]

Requirement #7: The results of evaluations and determinations made under section 333(a)(1)(D) during such year.

Section 333 of the PHS Act establishes the framework by which NHSC evaluates formal requests from facilities seeking eligibility for NHSC recruitment and retention assistance (see **Requirement 2** for the number of applications received and their disposition). The following describes the process by which NHSC determines the eligibility of health care facilities for NHSC recruitment and retention assistance. Eligibility is based on criteria including the continued need for health professionals in an area; the appropriate and efficient use of NHSC members previously assigned to that entity; community support for the assignment of an NHSC member to that entity; the HPSA's unsuccessful efforts to secure health professionals; the reasonable prospect of sound fiscal management by the entity; and the entity's willingness to support or facilitate mentorship, professional development, and training opportunities for Corps members.

There is a three-step process for obtaining approval to become an NHSC site which determines an entity's compliance with section 333(a)(1)(D) of the PHS Act prior to acceptance into the program. First, the geographic area, population group served by the site, or the facility must be designated as a HPSA. Generally, the need and demand for health professionals is documented by the ratio of available health professionals to the number of individuals in the area (see 42 CFR Part 5). Second, the area, population group, or facility must be a HPSA of greatest shortage. Indicators analyzed and scored to determine which HPSAs are in greatest need and reflect different patient utilization patterns for primary care, dental, and mental health services include:

[28] "Evaluation of the Effectiveness of the National Health Service Corps" Final Report. May 31, 2000. Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill and Mathematica Policy Research, Inc.
[29] Negrusa, S, Ghosh, P, Warner, JT. "Provider Retention in High Need Areas: Final Report". December 2014. https://aspe.hhs.gov/pdf-report/provider-retention-high-need-areas.
[30] Negrusa, S, Hogan, P, Ghosh, P, Watkins, L. "National Health Service Corps – An Extended Analysis". September 2016. https://aspe.hhs.gov/pdf-report/national-health-service-corps-extended-analysis

- Ratio of health providers to individuals in the area,
- Rate of low birth weight births,
- Rate of infant mortality,
- Rate of poverty,
- Accessibility of primary health care services (travel time or distance),
- Presence of fluoridated water,
- Ratios of population under 18 and over 65, and
- Prevalence of alcohol or substance abuse.

HPSA scores range from 1 to 25 for primary care and mental health and 1 to 26 for dental care (with 1 representing the least need). All FQHCs and those Rural Health Clinics that provide access to care regardless of ability to pay receive automatic facility HPSA designation. These facilities may have a HPSA score of 1 indicating either a relatively low need or the possibility that no data was provided in order to compute a HPSA score.

Finally, for an application to be accepted, the submitting entity must meet all of the following requirements:

- Be part of a system of care;
- Have a documented record of sound fiscal management;
- Verify appropriate and efficient use of current and former NHSC personnel;
- Be accessible to individuals regardless of their ability to pay;
- Accept Medicaid, Medicare, and CHIP beneficiaries;
- Maintain a sliding discount fee schedule; and
- Have general community support for the assignment of an NHSC member to that entity.

NHSC offers NHSC recruitment and retention assistance to all facilities that apply and meet the above requirements.

Upon approval of their application, facilities post vacancies on the Health Workforce Connector as they occur. NHSC lists vacancies on the Health Workforce Connector, which includes primary care, dental health, and behavioral health provider vacancies in designated HPSAs. BHW redesigned the NHSC Health Workforce Connector in FY 2012 to provide users with expanded information related to the services provided and populations served by NHSC-approved sites. From October 1, 2015, through September 30, 2016, the number of new vacancies created was 7,297, and 1,396 vacancies were filled during that period. As of September 30, 2016, there were 5,015 vacancies listed. The Health Workforce Connector is located on the NHSC website: https://connector.hrsa.gov/.

V. Conclusion

The achievements of NHSC in 2016 are indicative of the increased promotion and outreach of the program and the greater collaboration with partners made possible by the enhanced resources provided to NHSC. These resources allowed NHSC to increase to record levels, serving the health care needs of over 11 million patients across the United States.

NHSC will continue its focus on ensuring that NHSC providers are serving in the nation's high-need areas and leverage the existing statutory authority to encourage individuals to pursue a career in primary care. These efforts and the fostering of collaborative partnerships will allow NHSC to continue to address the nationwide shortage of health care providers in underserved communities.

Appendix A: National Health Service Corps FY 2016 Field Strength*

Data as of 09/30/2016

State	Total	Total NHSC LRP Clinicians Serving	Total NHSC SP Clinicians Serving	Total S2S LRP Clinicians Serving	Total SLRP Clinicians Serving	PHY	DD	RDH	NP	PA	CNM	M&B	RN (SLRP)	PHARM (SLRP)	Urban	Rural	Grantee	Non-Grantee
AK	140	84	2	0	54	32	13	1	17	24	2	49	0	2	41	45	16	70
AL	99	97	2	0	0	14	6	1	37	3	2	36	0	0	82	17	51	48
AR	122	120	1	1	0	7	9	3	25	2	0	76	0	0	71	51	35	87
AS	1	0	1	0	0	0	1	0	0	0	0	0	0	0	0	1	0	1
AZ	404	335	28	4	37	87	61	6	98	45	13	92	0	2	274	93	136	231
CA	771	619	56	5	91	157	186	9	118	138	10	149	0	4	584	96	533	147
CO	411	207	15	2	187	89	35	13	45	64	9	144	0	12	174	50	144	80
CT	234	217	15	2	0	39	7	8	50	12	6	112	0	0	232	2	147	87
DC	148	115	4	2	27	47	16	5	39	6	6	29	0	0	121	0	96	25
DE	24	5	0	0	19	11	1	0	5	2	0	5	0	0	3	2	2	3
FL	355	331	22	2	0	93	46	4	101	44	8	59	0	0	330	25	255	100
GA	178	154	13	3	8	45	21	3	24	16	2	67	0	0	105	65	59	111
GU	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1	0
HI	49	38	0	0	11	10	6	2	11	1	1	18	0	0	30	8	36	2
IA	102	87	1	1	13	14	8	5	18	11	1	45	0	0	42	47	35	54
ID	298	267	3	1	27	50	23	9	35	52	0	125	0	4	211	60	125	146
IL	598	500	18	7	73	160	35	3	163	56	25	156	0	0	458	67	335	190
IN	112	108	2	2	0	32	12	2	13	2	7	44	0	0	103	9	70	42
KS	98	78	4	1	15	24	8	5	24	16	0	21	0	0	49	34	39	44
KY	104	78	0	0	26	14	12	4	32	6	0	36	0	0	44	34	36	42
LA	186	130	5	1	50	40	17	1	47	6	0	75	0	0	106	30	82	54
MA	199	108	16	3	72	43	20	3	55	15	3	56	4	0	127	0	111	16
MD	239	173	11	4	51	77	6	5	37	12	7	95	0	0	179	9	105	83

State	Total	Total NHSC LRP Clinicians Serving	Total NHSC SP Clinicians Serving	Total S2S LRP Clinicians Serving	Total SLRP Clinicians Serving	PHY	DD	RDH	NP	PA	CNM	M&B	RN (SLRP)	PHARM (SLRP)	Urban	Rural	Grantee	Non-Grantee
ME	62	48	2	1	11	14	7	3	9	4	0	25	0	0	36	15	27	24
MI	423	286	12	2	123	74	47	30	79	67	6	120	0	0	252	48	209	91
MN	211	190	8	1	12	17	19	8	23	16	3	125	0	0	110	89	58	141
MO	427	397	6	4	20	99	46	16	92	17	3	154	0	0	284	123	176	231
MP	10	9	1	0	0	1	0	0	1	8	0	0	0	0	0	10	0	10
MS	118	117	1	0	0	16	4	4	58	2	1	33	0	0	56	62	49	69
MT	192	176	6	1	9	32	12	5	21	35	1	85	0	1	63	120	52	131
NC	237	200	23	6	8	62	19	3	42	63	4	44	0	0	122	107	103	126
ND	45	38	0	0	7	3	4	2	13	9	0	12	0	2	9	29	10	28
NE	72	49	4	0	19	14	10	3	14	12	0	17	0	2	37	16	33	20
NH	13	12	0	1	0	2	1	0	2	1	0	7	0	0	9	4	7	6
NJ	29	16	1	0	12	10	7	0	1	2	0	9	0	0	16	1	14	3
NM	204	190	13	1	0	48	37	10	40	25	7	37	0	0	127	77	125	79
NV	78	58	0	0	20	13	7	5	17	15	1	17	1	2	46	12	36	22
NY	740	674	13	4	49	223	65	17	147	82	30	176	0	0	631	60	363	328
OH	223	189	5	2	27	58	39	8	68	1	1	48	0	0	163	33	146	50
OK	220	219	1	0	0	26	17	8	40	18	3	108	0	0	77	143	60	160
OR	392	324	27	4	37	86	35	16	85	44	1	123	0	2	289	66	235	120
PA	189	174	10	5	0	40	33	8	29	30	4	45	0	0	167	22	148	41
PR	22	21	1	0	0	17	1	0	0	0	0	4	0	0	0	22	21	1
RI	48	9	2	0	37	14	15	4	1	0	0	9	5	0	11	0	11	0
SC	166	157	6	3	0	35	9	6	62	23	2	29	0	0	133	33	125	41
SD	63	62	1	0	0	2	8	4	12	16	1	20	0	0	34	29	26	37
TN	193	131	2	1	59	23	21	2	83	6	3	55	0	0	99	35	64	70
TX	210	186	21	3	0	36	34	6	49	24	0	61	0	0	173	37	104	106
UT	124	120	4	0	0	29	10	0	13	38	1	33	0	0	86	38	68	56

State	Total	Total NHSC LRP Clinicians Serving	Total NHSC SP Clinicians Serving	Total S2S LRP Clinicians Serving	Total SLRP Clinicians Serving	PHY	DD	RDH	NP	PA	CNM	M&B	RN (SLRP)	PHARM (SLRP)	Urban	Rural	Grantee	Non-Grantee
VA	104	73	7	1	23	20	15	1	21	6	0	39	1	1	36	45	52	29
VI	3	3	0	0	0	0	1	1	0	1	0	0	0	0	3	0	3	0
VT	31	6	0	0	25	10	8	0	9	3	0	1	0	0	0	6	6	0
WA	421	352	23	3	43	58	88	13	47	47	4	150	9	5	332	46	258	120
WI	229	161	15	1	52	34	56	12	44	17	5	61	0	0	137	40	124	53
WV	80	62	2	0	16	24	6	4	16	16	1	12	0	1	43	21	50	14
WY	41	32	1	0	8	8	0	1	2	6	0	24	0	0	15	18	3	30
Total	**10,493**	**8,593**	**437**	**85**	**1,378**	**2,233**	**1,230**	**292**	**2,153**	**1,187**	**184**	**3,172**	**20**	**40**	**6,962**	**2,135**	**5,215**	**3,900**
Percentage of Field Strength		**81.89%**	**4.16%**	**0.81%**	**13.13%**	**21.28%**	**11.72%**	**2.78%**	**20.35%**	**11.31%**	**1.75%**	**30.23%**	**0.19%**	**0.38%**	**76.38%**	**23.21%**	**57.21%**	**42.79%**

***The NHSC Field Strength is defined as the number of practicing NHSC clinicians currently providing obligated services in approved NHSC sites. This includes NHSC loan repayors, NHSC scholars that have completed training and are currently completing their service obligation, and SLRP loan repayors fulfilling their service obligations.**

NHSC SP = Scholars fulfilling NHSC obligation
NHSC LRP = Loan repayors fulfilling NHSC obligation
S2S LRP = Students to Service fulfilling NHSC obligation
SLRP = State Loan Repayment Program loan repayors fulfilling service obligation
PHY = Allopathic/Osteopathic Physicians (includes psychiatrists)
DD = Dentists
RDH = Registered Dental Hygienist
NP = Nurse Practitioners
PA = Physician Assistants
CNM = Certified Nurse Midwife
M&B = Includes Health Service Psychologist, Marriage and Family Therapist, Psychiatric Nurse Specialist, Licensed Professional Counselor, and Licensed Clinical Social Worker
PHARM = Pharmacist (SLRP only)
RN = Registered Nurse (SLRP Only)
Urban = clinicians serving in an urban setting; does not include SLRP
Rural = clinicians serving in a rural setting as defined by the Federal Office of Rural Health Policy; does not include SLRP
Grantee = clinicians serving in a Federally Qualified Health Center (FQHC); does not include SLRP
Non-Grantee = clinicians serving at any site type other than FQHC; does not include SLRP